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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,264	11/26/2003	Ratnesh K. Sharma	200312651-1	6446

22879 7590 03/08/2007
HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER	
MARC, MCDIEUNEL	
ART UNIT	**PAPER NUMBER**
3661	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/721,264	SHARMA ET AL.	
	Examiner	Art Unit	
	McDieunel Marc	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 26 November 2003.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-50 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-50 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 11/26/2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-50 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-50 are rejected under 35 U.S.C. 102(e) as being anticipated by Bash et al (U.S. Pa. No. 7,072,739 B2, herein after 739').

As per claims 1 and 43, **Bash et al.** 739' teaches a "DATA CENTER ROBOTIC DEVICE" (see title) equates to a method for data connectivity in a room with a robotic device, (see abstract, particularly "A method for operating a data center with a robotic device.") said method comprising:

detecting at least one condition with a plurality of sensors (see col. 8, line 31-33, particularly "The robotic device 146 contains sensors 148 for detecting one or more conditions in the data center 100.");

communicating the detected at least one condition from the sensors to associated access points (see col. 18, lines 16-26, "As the robotic device 302 travels along the plotted route, which may include provisions for the robotic device 302 to stop at various points to perform detection of the various conditions listed above,

the robotic device 302 may detect the various conditions at step 508. In addition, step 508 may include provisions for the robotic device 302 to obtain multiple condition measurements in areas of various locations along the plotted route. For instance, the robotic device 302 may obtain multiple condition measurements to determine relatively more accurate condition information and/or to determine possible solutions to determined problems."), note that various points equate to access points;

selecting one or more access points (see col. 8, line 17-18, "stop at various points to perform detection of the various conditions"), note that stopping at a point equate to selecting;

maneuvering the robotic device to a location in a vicinity of one or more of the selected access points (see col. 21, lines 35-49, "13. A method for operating a data center with a robotic device, said method comprising: plotting a route for the robotic device to travel in the data center; maneuvering the robotic device to travel along the plotted route; detecting one or more conditions in the data center with the robotic device, wherein the one or more conditions comprise at least one of gas, smoke, noise, temperature, pressure, humidity, airflow velocity, server performance, and vent impedance; determining whether the one or more conditions in the data center are within respective norms; and manipulating one or more objects in response to the one or more conditions being outside the respective norms." and col. 18, lines 16-26), note that the disclosure of line 21 works in conjunction with col. 18 as mentioned above in order to accentuate on the access points limitation;

communicating the detected at least one condition from one or more of the selected access points to the robotic device (see col. 17, lines 11-23, "At step 408, the robotic device 302 may be maneuvered to the locations of the one or more detected conditions in manners described hereinabove. At step 410, the robotic device 302 may image the locations of the one or more detected conditions. <u>The images obtained may be fed to the user</u> substantially in real-time. The image(s) of the locations may be used to determine the cause of the one or more detected conditions. For example, a user may determine that a temperature rise in one of the racks, e.g., rack 102, may be due to blockage of a vent 116 configured to supply cooling fluid to the rack. The user may operate the robotic vehicle 302 to remove the blockage to thus enable substantially free flow of cooling fluid to the rack at step 410.");

maneuvering the robotic device to a location in a vicinity of a base station (see col. 15, lines 9-18, "At step 414, the device controller 302 may determine whether another condition has been detected. If there has been another condition detected, the device controller 302 may cause steps 406 414 to be repeated. If there has not been another condition detected, the device controller 302 may cause the robotic device 302 to enter into an idle state as indicated by step 402. The idle state may comprise <u>maneuvering the robotic device 302 to a base station</u> where the power source, e.g., DC battery, of the robotic device 302 may be recharged."); and

communicating the detected at least one condition from the robotic device to the base station (see col. 8, lines 33-43, "The detected conditions may include, for example, sounds, images, environmental conditions (e.g., temperature, pressure, air flow, humidity, location, etc.), etc. In one embodiment, the robotic device <u>146</u> may transmit the detected conditions to a user, e.g., a controller

external to the robotic device 146, which may be animate or inanimate. The user may rely upon the detected conditions to vary the position and orientation of the robotic device 146. In another embodiment, the robotic device 146 may process the detected conditions and perform certain actions in response to the detected conditions,"); and with respect to claim 43, **Bash et al.** 739' teaches a "DATA CENTER ROBOTIC DEVICE" (see title as indicated above) contains a computer readable storage medium on which is embedded one or more computer programs, said one or more computer programs implementing a method for data connectivity in a room with a robotic device, said one or more computer programs comprising a set of instructions for (see col. 23, lines 36-40).

As per claim 2, **Bash et al.** 739' teaches a method that further comprising dividing a room into zones containing sensors (see fig. 1, elements 10-108 and 134-144); and associating the access points with the sensors of the particular zones (see fig. 1, wherein each rack being considered as a zone).

As per claim 3, **Bash et al.** 739' teaches a method that further comprising activating a beacon in response to receipt of the detected at least one condition from the sensors; detecting the activated beacon (see col. 12, lines 60-61, "a server may appear in the captured image, which the device controller 304 may recognize. The image may also indicate that a fault signal, e.g., a blinking red light, is active."); and wherein the step of selecting one or more access points comprises selecting the access point associated with the activated beacon (see col. 13, lines 66 – to – col. 14 lines -5, "For example, the operational mode 400 may be initiated in response to a predetermined lapse of time, in response to receipt of a transmitted signal, and/or in response to a detected change in a condition of the data center 100 (e.g., alarm detection, gas detection, smoke detection, temperature, humidity, location of the robotic device, etc.").

As per claim 4, **Bash et al.** 739' teaches a method wherein the step of detecting the activated beacon comprises detecting the activated beacon with a camera mounted in the room (see col. 14, lines 29-48), said method further comprising:

communicating a location of the activated beacon to the robotic device (see col. 14, lines 30-33, "For example, one or more cameras may be provided in the data center to image the robotic device 302 and to thus determine its location.").

As per claim 5, **Bash et al.**, 739' teaches a method wherein the robotic device comprises a camera and wherein the step of detecting the activated beacon comprises detecting the activated beacon with the camera of the robotic device (see col. 12, lines 56-67).

As per claim 6, **Bash et al.**,739' teaches a method wherein the step of selecting one or more access points comprises selecting a plurality of access points (see fig. 1, wherein each rack being taken as access point), said method further comprising:

maneuvering the robotic device to the vicinities of selected ones of the plurality of access points (see col. 2, lines 1-9); and

communicating the detected at least one condition from the plurality of access points to the robotic device prior to the step of maneuvering the robotic device to a location in a vicinity of the base station (see col. 13, lines 35-38, "the robotic device 302 may also include a display device, e.g., a monitor, one or more speakers, and a microphone. The robotic device 302 may detect audible alerts, e.g., alarms sounding from a component in the data center, and may relay that information to a user."), it has been shown clearly that the robot may relay information to a user, therefore the condition has been known prior to maneuvering to the base station and bear in mind that the user is at the base station.

As per claim 7, **Bash et al.** 739' teaches a method wherein the vicinities of the plurality of access points comprise download locations (see col. 14, lines 29-30, wherein tracking being taken as downloading locations), said method further comprising:

devising a route for the robotic device to follow in visiting the download locations of the selected ones of the plurality of access points (see col. 14, lines 49-61).

As per claim 8, **Bash et al.** 739' teaches a method wherein the step of devising a route for the robotic device comprises devising a route for the robotic device at the base station, said method further comprising the step of communicating the devised route for the robotic device from the base station to the robotic device (see col. 14, lines 38-39, "it may rely upon global positioning system (GPS) technologies"), note that inherently we have a base station for communication locations.

As per claim 9, **Bash et al.** 739' teaches a method wherein the step of devising a route for the robotic device comprises devising at least one of a route and a timing scheme based upon a routing algorithm (see col. 16, lines 13-17, "the robotic device 302 may implement an algorithm stored in its memory 316 designed to control the manipulator operations to perform these functions. In any respect, the robotic device 302 may be used to remove objects that may be impeding airflow through the vents 116."), note that any respect has been interpreted broadly, so that timing scheme falls into it.

As per claim 10, **Bash et al.** 739' teaches a method wherein the step of devising a route based upon a routing algorithm comprises devising a route based upon a routing algorithm that enables the robotic device to visit the download locations of the plurality of access points within a minimal amount of time (see col. 16, lines 13-17 and col. 14, lines 57-61, "This determined route may comprise a route that may take the shortest amount of time, for example. The robotic device 302 may follow the determined route and make any necessary adjustments in the event that obstacles are present along the route.").

As per claim 11, **Bash et al.** 739' teaches a method that further comprising: categorizing the plurality of access points into a plurality of groups; and wherein the step of devising a route based upon a routing algorithm comprises devising a route based upon the categorization of the plurality of access points (see fig. 1, elements 102-108).

As per claim 12, **Bash et al.** 739' teaches a method wherein the step of categorizing the plurality of access points into a plurality of groups comprises categorizing the plurality of access points according to historical data pertaining to the at least one condition in associated areas of the plurality of access points (see fig. 1, elements 102-108 and col. 18, lines 47-55), note that storing algorithms being taken as historical data

As per claim 13, **Bash et al.** 739' teaches a method that further comprising: deploying a plurality of robotic devices and a plurality of CRAC units (see col. 3, lines 27-40); and wherein the step of devising at least one of a route and a timing scheme based upon a routing algorithm comprises devising at least one of a route and a timing scheme based upon one or more of the number of robotic devices deployed and response times of the plurality of CRAC units (see figs. 2A and 2C).

As per claim 14, **Bash et al.** 739' teaches a method wherein the step of devising at least one of a route and a timing scheme based upon a routing algorithm comprises devising at least one of a route and a timing scheme based upon availability and efficiency studies of cooling system components and components housed in the room (see col. 16, lines 10-17), note that the time scheme has been notice above. Examiner views the availability and efficiency studies as function that being perform by the user remotely.

As per claim 15, **Bash et al.** 739' teaches a method wherein the step of devising at least one of a route and a timing scheme based upon a routing algorithm comprises devising at least one of a route and a timing scheme based upon substantially based on one or more of the reliabilities of components and service level agreements (see col. 7, lines 63-65, "`A plurality of temperature sensors 136 144, e.g., thermistors, thermocouples, etc., may be positioned at various locations throughout the data center 100.`"), note that service level agreements being taken as the way electronic components work with each other in a HVAC system. Although, were are dealing with cooling system.

As per claims 16 and 17, **Bash et al.** 739' teaches a method that further comprising: implementing a computational fluid dynamics tool to determine potential problem areas in the room; and wherein the step of devising a route based upon a routing algorithm comprises devising a route based upon an output of the computational fluid dynamics tool (see col. 4, lines39-44, wherein the potential problem is heat dissipation), note that the algorithm has been addressed above.

As per claim 17, **Bash et al.** 739' teaches a method wherein the at least one condition comprises an environmental condition, said method further comprising: manipulating at least one

cooling system component in response to the detected at least one environmental condition communicated from the robotic device (see col. 4, lines 33-48).

As per claim 18, **Bash et al.** 739' teaches a method wherein the step of detecting at least one condition comprises tracking one or more components in the room, said method further comprising: creating or updating an inventory of components in response to the detected at least one condition communicated from the robotic device (see col. 5, line 53 – to – col. 6, line -7, wherein inventory being taken as finding suitable type component to accomplish the work).

As per claim 19, **Bash et al.** 739' teaches a method that further comprising: charging a battery of the robotic device at the base station in response to a determination that the battery of the robotic device requires charging (see col. 15, lines 15-18).

As per claim 20, **Bash et al.** 739' teaches a "DATA CENTER ROBOTIC DEVICE" equate to a system for data connectivity in a room with a robotic device (see title), said system comprising:

a plurality of sensors positioned in various locations in the room, said sensors being configured to detect at least one condition (see col. 7, line 63 to col. 8, line -11, "A plurality of temperature sensors 136 144, e.g., thermistors, thermocouples, etc., may be positioned at various locations throughout the data center 100. By way of example, temperature sensors 136 may be provided at the inlets of the racks 102 108 to detect the temperature of the cooling fluid delivered into the racks 102 108. Temperature sensors 138 may be provided at the outlets of the racks 102 108 to detect the temperature of the heated air exhausted from the racks 102 108. Temperature sensors 140 may further be located at the vents 116 to detect the temperature of the cooling fluid supplied from the space 112. In addition, temperature sensors 142, 144 may respectively be positioned near the inlet and outlet of the air conditioning unit 114 to respectively detect the temperatures of the heated air entering the air conditioning unit 114 and the cooling fluid delivered to the space 112.");

a plurality of access points associated with one or more of the sensors located in respective vicinities of the plurality of access points (see col. 17, lines 11-23 as stated above), said plurality of access points being configured to receive the detected at least one condition from the associated one or more sensors (see col. 7, line 63 to col. 8, line -11, as stated above);

a robotic device configured to traverse the room and to receive the detected at least one condition from the plurality of access points when the robotic device is in the respective vicinities of the plurality of access points (see col. 18, lines 16-26 and col. 15, lines 9-18, as stated above); and

a base station configured to communicate with the robotic device when the robotic device is in a vicinity of the base station (see col. 8, lines 33-43, as stated above).

As per claim 21, **Bash et al.** 739' teaches a method wherein the robotic device is configured to communicate with a respective one of the plurality of access points when the robotic device is within a predetermined distance to the respective one of the plurality of access points (see fig 1, elements 102-108).

As per claim 22, **Bash et al.** 739' teaches a method wherein the predetermined distance comprises a range of between approximately 1-4 feet (see col. 1, lines 24-31 as noted above), therefore having a range of 1-4 feet is embedded.

As per claims 23 and 24, **Bash et al.** 739' teaches a method that further comprising: a plurality of electronic components positioned at various locations of the room (see col. 14, lines 30-33, as noted above); and wherein said plurality of sensors are further configured to detect the at least one condition in areas around respective ones of the plurality of electronic components (see col. 7, lines 63-65 as noted above, and wherein the sensors are configured to detect the at least one condition in areas around respective ones of the one or more racks (see col. 7, line 63 – to – col. 8, line -11).

As per claim 25, **Bash et al.** 739' teaches a method that further comprising: a beacon associated with respective ones of the plurality of access points, wherein said plurality of access points are configured to activate a respective beacon in response to receipt of the at least one condition detected by associated sensors (see col. 12, lines 60-61 as noted above).

As per claims 26 and 27, **Bash et al.** 739' teaches a method that further comprising: one or more cameras mounted at various locations of the room, the one or more cameras being configured to detect activation of the beacons (see col. 14, lines 30-33), wherein the one or more cameras are configured to communicate detection of the activated beacons to the robotic device, and wherein the robotic device is configured to travel to a location in the vicinity of the access point that activated the beacon (see col. 13, lines 66 – to – col. 14 lines -5 as noted above).

As per claim 28, **Bash et al.** 739' teaches a method wherein the plurality of sensors comprise RFID devices configured to transmit information to distances within approximately 1-4 feet (see col. 12, line 52-53, wherein light being considered as RFID).

As per claim 29, **Bash et al.** 739' teaches a method wherein the base station is configured to devise a route for the robotic device to follow in visiting the respective locations in the vicinities of the plurality of access points (see col. 14, lines 49-61 as noted above), and wherein the base station is configured to communicate the devised route to the robotic device (see col. 14, lines 38-39 as noted above).

As per claim 30, **Bash et al.** 739' teaches a method wherein the robotic device is configured to devise a route for the robotic device to follow in visiting the respective locations in the vicinities of the plurality of access points (see col. 14, lines 49-61 as noted above).

As per claim 31, **Bash et al.** 739' teaches a method that further comprising: cooling system components; and wherein the base station is configured to manipulate the cooling system components based upon the at least one detected condition communicated from the robotic device (see col. 5, line 53 – to – col. 6, line -7).

As per claim 32, **Bash et al.** 739' teaches a method wherein the base station is configured to create or update an inventory of components housed in the room based upon the at least one detect the condition communicated from the robotic device (see col. 5, line 53 – to – col. 6, line -

7, wherein inventory being taken as finding suitable type component to accomplish the work, as noted above).

As per claim 33, **Bash et al.** 739' teaches a method wherein the base station further comprises a recharging station for charging a battery of the robotic device (see col. 15, lines 15-18, as noted above).

As per claim 34, **Bash et al.** 739' teaches a "DATA CENTER ROBOTIC DEVICE" (see title) equates to a system for data connectivity in a room (see abstract), said system comprising:

means for detecting at least one condition (Bash et al. the above sensors are detection means);

means for communicating the detected at least one condition to associated access points; means for selecting one or more access points;

means for collecting information (see abstract, particularly, Bath's et al. robot contains a camera for collecting information), the means for collecting information comprising means for maneuvering the means for collecting information to a location in a vicinity of one or more of the selected access points (see abstract, particularly the robot);

means for communicating the detected at least one condition from one or more of the selected access points to the means for collecting information (see col. 3, lines 6-17, "a robotic device is configured to travel around a data center and detect various conditions in the data center. The robotic device is also comprised of various tools configured to perform anthropomorphic functions on components or objects located in the data center. For example, the robotic device may be configured to perform various functions related to servers or other components housed in racks of the data center. In addition, the robotic device may be configured to operate various apparatus of a system designed to cool heat generating/dissipating components housed in racks or otherwise located in the data center.");

the means for collecting information further comprising means for maneuvering the means for collecting information to a location in a vicinity of a means for controlling the room (see abstract, "The robotic device, which includes a camera and a manipulator, is maneuvered to travel to the location of the data center. The location of the data center is imaged with the camera of the robotic device and an object is manipulated with the manipulator of the robotic device."); and

means for communicating the detected at least one condition from the means for collecting information to the means for controlling the room (see "col. 8, lines 45-63").

As per claim 35, **Bash et al.** 739' teaches a method that further comprising: means for indicating receipt of the detected at least one condition; means for detecting the means for indicating; and means for selecting the access point associated with the means for indicating.

As per claim 36, **Bash et al.** 739' teaches a method that wherein the means for communicating the detected at least one condition from one or more of the selected access points to the means for collecting information further comprises means for communicating the detected at least one condition when the means for collecting information is in a vicinity of the one or more of the selected access points (see abstract, particularly the robot's camera).

As per claim 37, **Bash et al.** 739' teaches a method wherein the means for communicating the detected at least one condition from the means for collecting information to the means for controlling the room further comprises means for communicating the detected at least one condition when the means for collecting information is in a vicinity of the means for controlling the room (see figs. 4-5).

As per claim 38, **Bash et al.** 739' teaches a method that further comprising: means for devising a route for the means for collecting information (see abstract, particularly the robot's camera as noted above), said means for devising including a routing algorithm (see fig. 5).

As per claim 39, **Bash et al.** 739' teaches a method wherein the means for controlling the room comprises the means for devising a route (see abstract, particularly the robot's camera being used as means to control the room), the system further comprising: means for communicating a route devised by the means for devising to the means for collecting information (see abstract, particularly the robot's camera capable of collecting information).

As per claim 40, **Bash et al.** 739' teaches a method that further comprising: means for manipulating at least one cooling system component in response to detected at least one condition communicated from the means for collecting information (see col. 4, lines 33-48).

As per claim 41, **Bash et al.** 739' teaches a method that further comprising: means for creating or updating an inventory of components in response to the detected at least one condition communicated from the means for collecting information (see col. 5, line 53 – to – col. 6, line -7, wherein inventory being taken as finding suitable type component to accomplish the work, as noted above).

As per claim 42, **Bash et al.** 739' teaches a method that further comprising: means for charging a battery of the means for collecting information (see col. 15, lines 15-18, as noted above).

As per claim 44, **Bash et al.** 739' teaches a medium wherein said one or more computer programs further comprising a set of instructions for (see col. 2, lines 1-9):

activating a beacon in response to receipt of the detected at least one condition from the sensors; detecting the activated beacon (see col. 12, lines 60-61); and

wherein the step of selecting one or more access points comprises selecting the access point associated with the activated beacon (see col. 13, line 66 - to - col. 14, line -5 as noted above).

As per claim 45, **Bash et al.** 739' teaches a medium wherein said one or more computer programs further comprising a set of instructions for (see col. 2, lines 1-9):

selecting a plurality of access points (see col. 8, line 17-18 as noted above);

maneuvering the robotic device to the vicinities of selected ones of the plurality of access points (see col. 21, lines 35-49 as noted above); and

communicating the detected at least one condition from the selected ones of the plurality of access points to the robotic device prior to the step of maneuvering the robotic device to the location in a vicinity of the base station (col. 17, lines 11-23 and lines 33-43).

As per claim 46, **Bash et al.** 739' teaches a medium wherein said one or more computer programs further comprising a set of instructions for (see col. 2, lines 1-9):

devising a route for the robotic device to follow in visiting download locations of the selected ones of the plurality of access points (see col. 14, lines 49-61 as noted above).

As per claim 47, **Bash et al.** 739' teaches a medium wherein said one or more computer programs further comprising a set of instructions for (see col. 2, lines 1-9):

categorizing the plurality of access points into a plurality of groups (see fig. 1, the access points being categorizing by naming the racks 102, 104 and 106); and

devising a route based upon the categorization of the plurality of access points (see col. 21, lines 35-49 and col. 18, lines 16-26 as noted above).

As per claim 48, **Bash et al.** 739' teaches a medium wherein said one or more computer programs further comprising a set of instructions for (see col. 2, lines 1-9):

implementing a computational fluid dynamics tool to determine potential problem areas in the room; and devising a route based upon an output of the computational fluid dynamics tool (see col. 4, lines39-44, wherein the potential problem is heat dissipation), note that the algorithm has been addressed above.

As per claim 49, **Bash et al.** 739' teaches a medium wherein said one or more computer programs further comprising a set of instructions for (see col. 2, lines 1-9):

manipulating at least one cooling system component in response to the detected at least one condition communicated from the robotic device (see col. 21, lines 35-49 as noted above).

As per claim 50, **Bash et al.** 739' teaches a medium wherein said one or more computer programs further comprising a set of instructions for (see col. 2, lines 1-9):

creating or updating an inventory of components in response to the detected at least one condition communicated from the robotic (see col. 5, line 53 – to – col. 6, line -7, wherein inventory being taken as finding suitable type component to accomplish the work, as noted above).

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to McDieunel Marc whose telephone number is (571) 272-6964. The examiner can normally be reached on 6:30-5:00 Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

McDieunel Marc
Examiner
Art Unit 3661

Thursday, March 01, 2007

MM/

Thomas G. Black
THOMAS BLACK
SUPERVISORY PATENT EXAMINER